1.

(Once Amended) A late transition metal catalyst system for polymerization of olefin monomers comprising a Group 9, 10 or 11 metal complex stabilized by a bidentate ligand [structure] immobilized on a solid support where the [catalyst] late transition metal loading is less than 100 micromoles transition metal compound per gram of solid support, the Group 9, 10 or 11 metal complex of the formula:

LMX_r

wherein M is a Group 9, 10 or 11 metal; L is a bidentate ligand defined by the formula:

wherein A is a bridging group containing a Group 13-15 element; each E is independently a Group 15 or 16 element bonded to M; each R is independently a C₁/C₃₀ containing radical or diradical group which is a hydrocarbyl, substituted hydrocarbyl, halocarbyl, substituted halocarbyl, hydrocarbyl-substituted organometalloid, halocarbyl-substituted organometalloid, m and n are independently 1 or 2 depending on the valency of E; and p is the charge on the bidentate ligand such that the oxidation state of MX_r is satisfied;

each X is, independently, a hydride radical, a hydrocarbyl radical, a substituted hydrocarbyl radical, a halocarbyl radical, a substituted halocarbyl radical, hydrocarbyl-substituted organometalloid or halocarbyl-substituted organometalloid; or two X's are joined and bound to the metal atom to form a metallacycle ring containing from about 2 to about 20 carbon atoms, a neutral hydrocarbyl containing donor ligand; a halogen, an alkoxide, an aryloxide, an amide, a phosphide, or other univalent anionic ligand; or two X's are joined to form an anionic chelating ligand; or a neutral non-hydrocarbyl atom containing donor ligand; and r is 1, 2 or

<u>3</u>.

Claim 2, line 1: Replace the word "particle" with the word --solid--.

A2

- 3. (Once Amended) The catalyst system of claim 1 wherein the [supported catalyst] metal complex immobilized on the solid support is a homogeneous supported catalyst.
- 5. (Once Amended) The catalyst system of claim 1 [comprising a Group 9, 10 or 11 metal complex stabilized by a bidentate ligand structure having conjugated groups on a bridging element in said ligand] wherein the bridging group has a conjugated group.

AZ Y

Once Amended) A late transition metal catalyst system for polymerization of olefin monomers comprising a Group 9, 10 or 11 metal complex stabilized by a bidentate ligand [structure], and an organoaluminum compound [, and] immobilized on a solid support, the Group 9, 10 or 11 metal complex of the formula:

LMX_r

wherein M is a Group 9, 10 or 11 metal; L is a bidentate ligand defined by the formula:

$$\begin{bmatrix} R_m - E & E - R_n \end{bmatrix}^p$$

wherein A is a bridging group sontaining a Group 13-15 element; each E is independently a Group 15 or 16 element bonded to M; each R is independently a C₁-C₃₀ containing radical or diradical group which is a hydrocarbyl, substituted hydrocarbyl, halocarbyl, substituted hydrocarbyl, halocarbyl, substituted halocarbyl, hydrocarbyl-substituted organometalloid, halocarbyl-substituted organometalloid, m and n are independently 1 or 2 depending on the valency of E; and p is the charge on the bidentate ligand such that the oxidation state of MX_r is satisfied;

A3 Contd each X is, independently, a hydride radical, a hydrocarbyl radical, a substituted hydrocarbyl radical, a halocarbyl radical, a substituted halocarbyl radical, hydrocarbyl-substituted organometalloid or halocarbyl-substituted organometalloid; or two X's are joined and bound to the metal atom to form a metallacycle ring containing from about 2 to about 20 carbon atoms; a neutral hydrocarbyl containing donor ligand; a halogen, an alkoxide, an aryloxide, an arnide, a phosphide, or other univalent anionic ligand; or two X's are joined to form an anionic chelating ligand; or a neutral non-hydrocarbyl atom containing donor ligand; and r is 1, 2 or 3.

Claim 8, line 1: Insert the word --system -- after the word "catalyst".

Claim 10, line 1: Replace the word "particle" with the word --solid--.

AY

(Once Amended) The catalyst system of claim 6 wherein the [supported catalyst] metal complex immobilized on the solid support is a homogeneous supported catalyst.

A5

(Once Amended) A late transition metal catalyst system essentially without residual solvent for polymerization of olefin monomers comprising a Group 9, 10 or 11 metal complex stabilized by a bidentate ligand [structure] immobilized on a solid support, the Group 9, 10 or 11 metal complex of the formula:

wherein M is a Group 9, 10 or 11 metal; L is a bidentate ligand defined by the formula:

$$\begin{bmatrix} R_m - E & A & B - R_n \end{bmatrix}^p$$

wherein A is a bridging group containing a Group 13-15 element; each E is independently a Group 15 or 16 element bonded to M; each R is independently a C₁-C₃₀ containing radical or diradical group which is a hydrocarbyl, substituted hydrocarbyl, halocarbyl, substituted halocarbyl, hydrocarbyl-substituted organometalloid, halocarbyl-substituted organometalloid, m and n are independently 1 or 2 depending on the valency of E; and p is the charge on the bidentate ligand such that the oxidation state of MX_r is satisfied;

HS Contd

each X is, independently, a hydride radical, a hydrocarbyl radical, a substituted hydrocarbyl radical, a halocarbyl radical, a substituted halocarbyl radical, hydrocarbyl-substituted organometalloid or halocarbyl-substituted organometalloid; or two X's are joined and bound to the metal atom to form a metallacycle ring containing from about 2 to about 20 carbon atoms; a neutral hydrocarbyl containing donor ligand; a halogen, an alkoxide, an aryloxide, an amide, a phosphide, or other univalent anionic ligand; or two X's are joined to form an anionic chelating ligand; or a neutral non-hydrocarbyl atom containing donor ligand; and r is 1, 2 or 3.

Claim 14, line 1: Replace the word "particle" with the word -- solid --.

AG

15. (Once Amended) The catalyst system of claim 13 wherein the [supported catalyst] metal complex immobilized on the solid support is a homogeneous supported catalyst.

Claim 18, line 2: Replace the word "tetrakis(perfluorophenyl)boron" with the word -- tetrakis(perfluorophenyl)borate--.

Claim 19, line 2: Delete the word "ionizing".